



503.39144X00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): T. ITABASHI, et al.  
Application No.: 09/678,800  
Filed: October 4, 2000  
For: ELECTROLESS COPPER PLATING MACHINE THEREOF, AND  
MULTI-LAYER PRINTED WIRING BOARD  
Group: 2827  
Examiner: T. Dinh

**RESPONSE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

September 30, 2003

Sir:

In response to the Office Action mailed July 30, 2003, Applicants respectfully elect the Group I claims (that is, claims (5-7)/9, drawn to an electroless copper plating machine), this election being made with traverse.

Initially, Applicants respectfully traverse the conclusion by the Examiner that the Group I claims and Group II claims "are related as combination and subcombination". To the contrary, it is respectfully submitted that the Group I claims are drawn to an electroless copper plating machine and the Group II claims are drawn to an electroless copper plating machine, and thus each of the two groups of claims are drawn to a plating machine and not a combination and subcombination.

In addition, note that claim 5 defines an electroless copper plating machine which includes an electroless copper plating bath, a reaction bath and a filter unit for

separating the metal salt precipitate. Claim 5 forms one of the Group I claims. In comparison, claim 8 defines an electroless copper plating machine which includes an electroless copper plating bath, a reaction bath adding a metal or a compound containing a metal to the plating solution and an ultra filtration unit for removing the metal salt precipitate. Claim 8 forms part of the Group II claims. Noting that claim 5, one of the Group I claims, defines an electroless copper plating machine including, inter alia, a filter unit for separating the metal salt precipitate; and claim 8, one of the Group II claims, defines an electroless copper plating machine including, inter alia, an ultra filtration unit for removing the metal salt precipitate, a basis for the conclusion by the Examiner that the Group I claims and the Group II claims define a subcombination and combination is not seen.

Moreover, the contention by the Examiner that the combination as claimed does not require the particulars of the subcombination as claimed "because the combination does not require an ultra-filtration filter unit for ions passing through an ultra-filtration membrane and feeding back to a plating bath; therefore solid components can be continuously removed from the system" is noted. However, note that claim 5 recites a filter unit for separating the metal salt precipitate, while claim 8 recites an ultra filtration unit for removing the metal salt precipitate. Note further that claim 9, dependent, inter alia, on claim 5, recites that the filtration unit is a cross-flow ultra filtration unit or a filter press ultra filtration unit. Accordingly, the conclusion by the Examiner that the combination as claimed "does not require the particulars of the subcombination as claimed because the combination does not require an ultra-filtration filter unit" is

respectfully traversed, particularly in light of claims 8 and (5-7)/9, reciting ultra filtration units.

The additional contention by the Examiner that the subcombination of the Group I claims "has separate utility such as a filter unit for separate floating objects such as dust or solid barium sulfate" is respectfully traversed. It is respectfully submitted that the Examiner must consider the subject matter as claimed. Claim 5 defines an electroless copper plating machine having specified components, while claim 8 also recites an electroless copper plating machine having specified components. That is, each of the Group I and Group II claims are directed to electroless copper plating machines. Accordingly, it is respectfully submitted that there is no proper basis for the conclusion by the Examiner that the subcombination of the Group I claims has separate utility such as a filter unit for separate floating objects such as dust or solid barium sulfate.

In view of all of the foregoing, it is respectfully submitted that the restriction requirement as set forth in Item 1 on pages 2 and 3 of the Office Action mailed July 30, 2003 is improper; and reconsideration and withdrawal thereof, and consideration of all claims directed to an electroless copper plating machine in the above-identified application, are respectfully requested.

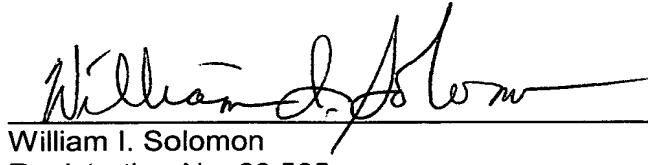
In any event, in order to provide a complete response to the Office Action mailed July 30, 2003, Applicants respectfully elect the Group I claims (claims (5-7)/9 drawn to an electroless copper plating machine), this election being made with traverse. At the very least, consideration of the Group I claims (5-7)/9, on the merits, in due course, is respectfully requested.

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To the extent necessary, Applicants petition for an extension of time under 37 CFR § 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Deposit Account No. 01-2135 (Case No. 503.39144X00), and please credit any excess fees to such Deposit Account.

Respectfully submitted,

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